Software Design
– from architecture to code

2 DAY

COURSE

LOCATION

DCU

Background

Software design is a key activity in ensuring quality software that meets both functional and non-functional requirements. It is the architectural process in software projects, drawing from the global organization of the system, and informing the detail for development.

Software is developed in many environments and with a choice of many development tool sets. While achievement of success in software projects has increased, it is still far from ideal in very many projects. The advent of more complex requirements and uncertainty of requirements, performance for scaled operation, and the special demands of security and data protection increase the challenges for success in projects. A special area of attention in ensuring success is application of an effective design approach.

Influences associated with better design include the use of object-orientation, modeling for requirement and design clarity, prototyping for proof of adequate solution, design patterns for code quality and transparency, and agile engineering for solution breakdown, iteration, and incremental release of software product.

Who should attend?

The event is a must for designers, analysts and software engineers who will be involved in software projects. It will also be of interest to technical managers who will be responsible for leading new development work.

Other staff in the organization, who will be involved in the analysis and design of software, including working on enterprise architecture, would also benefit from attending.

It would be beneficial, though not mandatory, if participants have already had some exposure to object-orientation.

The Event

The purpose of this training course is for participants to gain a thorough understanding of how to select and apply design techniques in the development of software systems.

It will show how design evolves in the project.

Topics include:

Essentials of Object Orientation

UML Overview

Requirements Modeling, Use Cases

Domain Analysis

Architectural Patterns

Design Patterns

Code Improvement

Re-factoring

Code Quality

From this workshop you will be able to:

- Understand how design is approached in software projects

- Apply a range of design techniques

- Understand how to achieve quality code

- Select appropriate techniques for design;

- Understand how implementation and test relate to design.

Fees and Registration

Course fee is €560, €480 for CSE Corporate Members

Fees will remain due in full if cancellations are received less than 7 working days before the course starts. However, names of participants may be substituted at any time.

Fees include course material and lunch. Please advise if any special dietary requirements.

To register, please email events@cse.dcu.ie with course title and date, attendees name, organisation name, contact name and phone number.